

March 18, 2005

Mr. Cliff Ives  
Sonoma County Department of Health Services-  
Environmental Health Division  
475 Aviation Boulevard, Suite 220  
Santa Rosa, CA 95403

**Re: Free Product Removal Report, Wiggins Property, 3454 Santa Rosa Avenue, Santa Rosa, California, SCDHS-EHD Site #00001849, NCRWQCB Site # 1TSR007**

Dear Mr. Ives:

In response to the Sonoma County Department of Health Services, Environmental Health Division's (SCDHS-EHD's) February 7, 2005 letter (Appendix A), this report presents the status and current remedial measures associated with the free product present in monitoring well MW-10 at the above-referenced site (Figures 1 and 2). On September 24, 2003 (3<sup>rd</sup> quarter of 2003), free product of an unknown thickness was first observed in MW-10 by the previous consultant. Winzler & Kelly Consulting Engineers (Winzler & Kelly) conducted the 2<sup>nd</sup> and 3<sup>rd</sup> quarter 2004 monitoring and sampling events and observed and documented free-phase product in well MW-10 at 0.05 feet and 0.15 feet, respectively. The most recent monitoring event of March 2, 2005, free product was measured at 0.02 feet.

Per the February 7, 2005 letter from the SCDHS-EHD, Winzler & Kelly reviewed the free product history in MW-10 and evaluated the most appropriate measure to address the known free product. Based on the observed thickness, limited occurrence, and that a remedial system is planned to be installed by June 2005, hydrocarbon adsorbent and hydrophobic socks were selected as the most appropriate technology. Each sock is capable of adsorbing approximately 32 fluid ounces of product and will not adsorb any groundwater. On March 2, 2005, the installation of the first adsorbent sock was performed concurrent with the recent groundwater monitoring and sampling activities.

#### **FREE PRODUCT REMOVAL ACTIVITIES**

A summary of the activities associated with the free product removal on March 2, 2005 is provided below.

***Personnel Present:*** Winzler & Kelly's technicians, Pon Xayasaeng and Brian Bacciarini, performed the free product removal activities.



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***Free Product Monitoring:*** Prior to free product removal, monitoring well MW-10 was monitored for the presence of free product (petroleum hydrocarbons) using an oil-water interface meter. Free product was measured to be approximately 0.02 feet thick. Additionally, a clear plastic bailer was used to visually verify the presence of free product.

***Free Product Removal:*** A 2-ounce (dry weight) hydrocarbon adsorbing, hydrophobic sock, attached to nylon rope was lowered into monitoring well MW-10. The free product-adsorbing sock was positioned in MW-10 such that half the sock was above the water table and half was below the water table.

***Free Product Evaluation and Disposal:*** The hydrocarbon adsorbing sock from MW-10 will be removed and inspected in approximately one month. The difference in weight before and after exposure to hydrocarbons will be evaluated. When needed, the hydrocarbon soaked sock will be placed in a labeled drum stored onsite for disposal. A new hydrocarbon adsorbing sock will be then be placed in MW-10.

### **Site Update**

Winzler & Kelly has developed a Remediation Action Plan (RAP) for the site and will be submitted on or before the established due date of March 19, 2005. As proposed in the Corrective Action Plan (CAP) and described in detail in the RAP, an ozone sparge system and ozone sparge points will be installed on site to address the dissolved hydrocarbons and minor free-phase product known to exist at the site. If free product is detected during the drilling of the ozone sparge points and that the extent of free product is larger than anticipated, it will be removed using a high-vacuum dual phase system. If free product is not detected in the proposed ozone sparge points, the free product in MW-10 will be addressed using the petroleum adsorbing socks and the proposed ozone sparge system.

Quarterly groundwater monitoring and sampling activities will be continued at the site, with the next monitoring and sampling event scheduled for June 2, 2005.



WINZLER & KELLY  
CONSULTING ENGINEERS

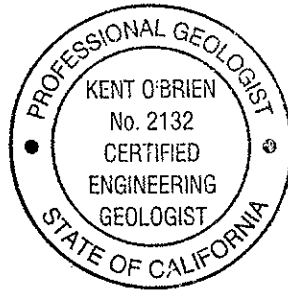
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Should you have any questions or comments regarding this project, please contact David J. Vossler, Project Manager, at (707) 523-1010.

Sincerely,  
WINZLER & KELLY

Pon Xayasaeng  
Environmental Engineer

Kent O'Brien, RG, CEG  
Senior Project Geologist



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Attachments:

Figures:

- Figure 1 – Location Map
- Figure 2 – Site Map

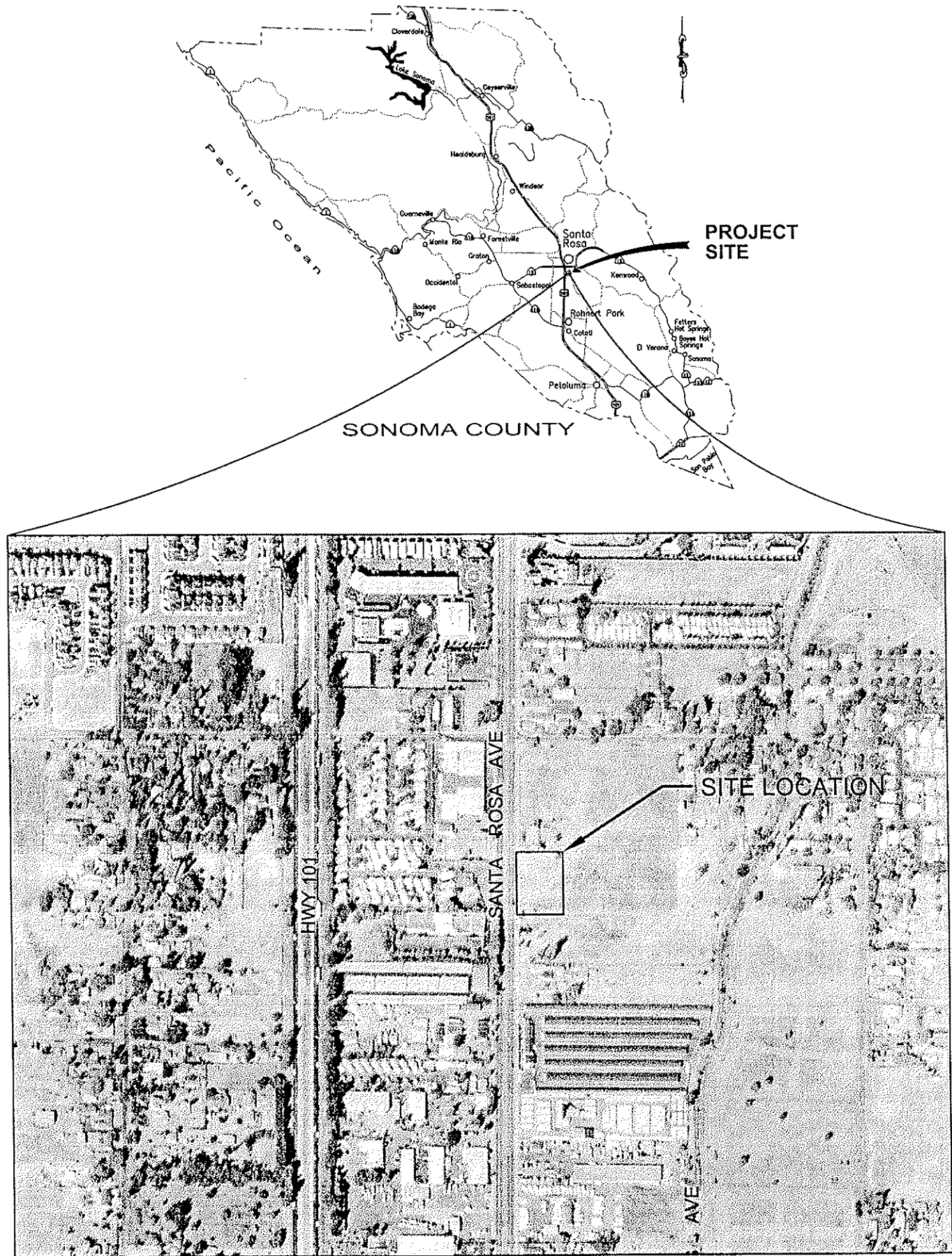
Appendices:

- Appendix A – Agency Correspondence

- c: Mr. Floyd Wiggins, Wiggins Enterprises, 1370 Airport Boulevard, Santa Rosa, CA 95403  
Mr. Scott Steever, Lanahan & Reilley, 3558 Round Barn Boulevard, Suite 300, Santa Rosa, CA 95403



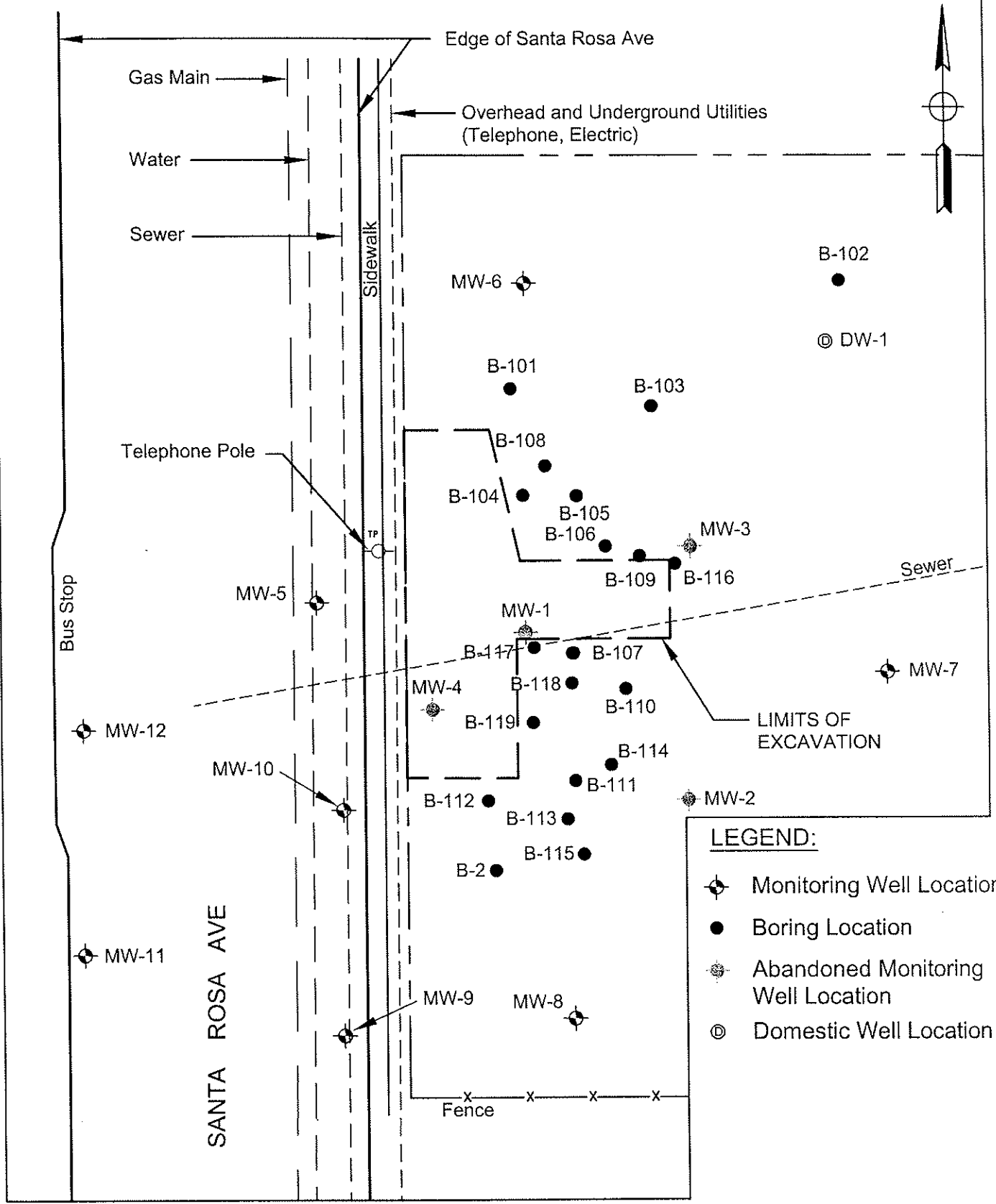
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WIGGINS PROPERTY  
3454 Santa Rosa Ave  
Santa Rosa, California

LOCATION MAP  
FIGURE 1

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**LEGEND:**

- Monitoring Well Location
- Boring Location
- Abandoned Monitoring Well Location
- Domestic Well Location

WIGGINS PROPERTY  
3454 Santa Rosa Ave  
Santa Rosa, California

SITE MAP  
FIGURE 2

**WINZLER & KELLY**  
CONSULTING ENGINEERS

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## **Appendix A**

### **Agency Correspondence**



COUNTY OF SONOMA  
DEPARTMENT OF HEALTH SERVICES

Rita Scardaci, MPH – Director  
Sharon Aguilera – Assistant Director

*Environmental Health Division*

Walter L. Kruse - Director

February 7, 2005

Wkt 0  
Floyd Wiggins  
Wiggins Enterprises  
1370 Airport Blvd.  
Santa Rosa, CA 95403-1009

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Re: 3454 Santa Rosa Avenue, Santa Rosa, CA — Leaking Underground Storage Tank Site  
SCDHS-EHD Site # 00001849, NCRWQCB Site # 1TSR007, SWRCB Cleanup Fund #1146  
Review of *Quarterly Groundwater Monitoring and Sampling 'Report – Third Quarter 2004*, and  
"Sampling Reduction Request" Letter (Winzler & Kelly, September 1, 2004)

Dear Mr. Wiggins:

This Department received the referenced documents on December 10, 2004. The submittals have been reviewed by staff, which includes a Licensed Civil Engineer. The report has been found generally acceptable. Recommendations to eliminate sampling for TPHd and TPHmo, however, are not acceptable. Please note the specific comments on this and other issues regarding the site as follows:

1. The sampling reduction request states that the detection of TPHd and TPHmo is due to weathered gasoline and not from TPHd or TPHmo. In a second point, it states that TPHd and TPHmo have never been identified in monitoring well groundwater samples with the exception of samples from MW-9 and MW-10. Tables 1 and 3A of Appendix D of the second quarter 2004 Winzler & Kelly report dated May 24, 2004, do not confirm these statements, however. Results for TPHd and TPHmo have been reported, in many cases, with no qualifying laboratory notes. In some cases, the laboratory notes that weathered gasoline is "impacting the low boiling point range of diesel", which is not to say that a full diesel range of compounds is not present. These cumulative historical results were not included in the referenced third quarter report but are required. TPHd and TPHmo analyses remain required.

It is noted that Total Oil and Grease (TOG) is reported in the September 24, 2003 sample from MW-5 at 2.0 mg/L (no qualifying notes). It will now be required to additionally analyze groundwater samples for TOG.

2. In an effort to reduce sampling costs, the sampling of MW-6, MW-7, and MW-8 may be eliminated. Sampling of these wells must be done, however, prior to presenting the site for closure after remediation has been completed.
3. Free product has been reported in MW-10. The referenced report, however, does not include information regarding its removal. Free product must be removed from monitoring wells. The method of removal and disposal must be included in quarterly reports.



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Please be advised that as of December 16, 2004, the following additional electronic submittals must be uploaded to the State Geotracker database as required by Title 23, Division 3, Chapter 30, Article 2, Sections 3890-3895 of the California Code of Regulations:

- Depths of screened intervals and lengths of screened intervals for any permanent sampling points,
- Boring logs (PDF format), and
- Complete copies of reports including the signed transmittal letters and professional certifications (PDF format).

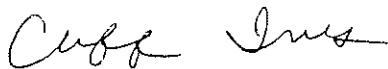
Information on electronic reporting can be found on the State Water Resources Control Board web page: [http://www.waterboards.ca.gov/ust/cleanup/electronic\\_reporting/](http://www.waterboards.ca.gov/ust/cleanup/electronic_reporting/)

**March 19, 2005** is established as the due date for submittal of a supplementary report addressing the free product reported in MW-10. As noted above, electronic submittal of all reports is now required. The Remedial Action Plan is also due at this time as noted in this Department's January 18, 2005 letter.

The State Cleanup Fund has discontinued its preapproval process because of a staffing shortage; however, reasonable and necessary costs should be eligible for reimbursement. The site must be in compliance with this Department's directives to be eligible for funding.

This Department values your continued effort to investigate and remediate this site. Please write or telephone (707) 565-6574 if you have any questions.

Sincerely,



Cliff Ives  
Senior Environmental Health Specialist  
Leaking Underground Storage Tank Local Oversight Program

CI

- c: Mr. Luis Rivera, North Coast Regional Water Quality Control Board  
Mr. David Charter, SWRCB Cleanup Fund  
Mr. Kent O'Brien, Winzler & Kelly, 495 Tesconi Circle, Santa Rosa, CA 95401